

Chapter

3

Solving Ethical Dilemmas

A Sample Case Exercise

A FOUR-STEP ANALYSIS PROCESS

In Chapter 1, you learned how to make defensible ethical decisions. The term *defensible* is important in this context. Although the emotions play an important role in the decision-making process, you have learned that defensible decisions are made by considering objective principles and weighing their effects on the issue. This process of logical analysis does more than help resolve a current dilemma; the analysis can help prevent or solve similar problems in the future.

In this chapter, you will employ the techniques you learned in Chapter 1 and expand on them. You will learn to recognize the relevant facts before you make an ethical decision, and you will see how to implement a decision and apply the fruits of your analysis to prevent the problem from recurring. The means to these skills is a four-step process presented in this chapter along with a case study. Step III of the process contains the decision-making approaches you learned in Chapter 1; other parts of the process will be new to you.

This chapter will apply the four-step process to the case study and provide extensive commentary. As you work through the steps, you may be surprised at the many levels of an ethical problem. As soon as one layer is "peeled" away, another appears. As ethical problem solvers, we must be sure we have exposed all the layers before implementing a decision; terminating analysis too soon may lead to a poor conclusion. The way to ensure consideration of all aspects is to complete the entire four-step process conscientiously.

Figure 3-1
A Four-Step Process
for Ethical Analysis and Decision Making

Step I. Understanding the situation

- A. List and number the relevant facts.
- B. Which of these raises an ethical issue? Why? What is the potential or resulting harm?
- C. List the stakeholders involved.

Step II. Isolating the major ethical dilemma

What is the ethical dilemma to be resolved NOW? State it using the form: Should **someone** do or not do **something**? Note: Just state the dilemma here; leave any reasoning for Step III.

Step III. Analyzing the ethicality of both alternatives in Step II*Consequentialism*

- A. If action in Step II is done, who, if anyone, will be harmed?
- B. If action in Step II is not done, who, if anyone, will be harmed?
- C. Which alternative results in the least harm, A or B?
- D. If action in Step II is done, who, if anyone, will benefit?
- E. If action in Step II is not done, who, if anyone, will benefit?
- F. Which alternative results in the maximum benefit, D or E?

Rights and Duties

- G. What **rights** have been or may be abridged? What **duties** have been or may be neglected? Identify the stakeholder and the right or duty. When listing a right, show its corresponding duty and vice versa.

Kant's Categorical Imperative

- H. If action in Step II is done, who, if anyone, will be treated with *disrespect*?
- I. If action in Step II is not done, who, if anyone, will be treated with *disrespect*?
- J. Which alternative is preferable, H or I?
- K. If action in Step II is done, who, if anyone, will be treated *unlike others*?
- L. If action in Step II is not done, who, if anyone, will be treated *unlike others*?
- M. Which alternative is preferable, K or L?
- N. Are there benefits if everyone did action in Step II?
- O. Are there benefits if nobody did action in Step II?
- P. Which alternative is preferable, N or O?

Step IV. Making a decision and planning the implementation

- A. Make a defensible ethical decision.
 Based on the analysis in Step III, respond to the question in Step II. Indicate the letters of the categories that best support your response. Add any arguments justifying your choice of these ethical principles to support your decision. Where there are conflicting rights and duties, choose and defend those that take precedence. (Note: Just make and justify your choice here; leave any action steps for parts B and D below.)
- B. List the specific steps needed to implement your defensible ethical decision.
- C. Show how the major stakeholders are affected by these actions.
- D. What other longer-term changes (political, legal, technical, societal, organizational) would help prevent such problems in the future?
- E. What should have been done or not done in the first place (at the pivot point) to avoid this dilemma?

To begin your study of the four-step analysis process, read the steps in Figure 3-1 in their entirety. For the sample case, we will respond to the process as though we were completing a worksheet like those found in Appendix B.

Examine the worksheet now and notice that the worksheet sections correspond to the entries in the figure. Perform the legal assessment and apply the guidelines in Figure 1-1 (page 9) to discover that something in the situation requires a closer look. Then carry out each step in Figure 3-1 to resolve the ethical dilemma.

SAMPLE CASE:

Too Much of a Good Thing? Workplace Monitoring Creates Privacy Dilemmas

Clare Valerian is a systems analyst at Califon, Inc., a large distributor of electronic equipment. Her primary responsibility is to make certain that the 127 end-users in Califon's U.S. headquarters can access data, post to accounts, send and receive e-mail, and accomplish all the other duties they need to perform on the corporation's local area network. She describes herself as a facilitator and troubleshooter. She must respond quickly to the users' complaints and needs, and even provide training for novice users. It's a demanding and time-consuming job, and until two weeks ago, Clare was spending up to 12 hours a day one-on-one with her users. She spent much of her time traveling to various sites in the different corporate buildings. The telephone was not much help, because Clare had to see for herself exactly what the users saw on their screens.

Recently, however, a utility program called LANSCAPE has changed her workday completely. The utility program and the telephone at her desk allow her to solve user problems without ever having to go directly to the users' workstations and terminals. The program allows Clare to view and actually take over the activities of network users. Typically, her first task upon arriving at her desk is to check her e-mail messages for trouble spots, print the messages, bring up LANSCAPE, and call each user one at a time.

"John, this is Clare in Systems. You left me a message about a problem with the inventory reorder module. I've got your screen up on my terminal now. Can you get out of the word processor and transfer to the inventory system? . . . Good. I see the main menu . . . Now, the reorder module. Go ahead and repeat the steps that got you into trouble yesterday. . . OK, fine . . . oops, I see what you did. The system asks for ENTER and you hit RETURN. What kind of keyboard do you have? . . . That's what I thought. For now, remember to hit ENTER. I'll get the maintenance programmer to change the module to accept RETURN too. Sorry about that. . . Thanks. Good-bye."

Then Clare goes on to the next call. "Bill, this is Clare in Systems. Your word processor bombed? Why don't you call it up and repeat the . . . oh, I

see the problem. You're working with the buggy version, 2.3. I'll delete it from the system. You'll have to remember to use V2.4 from now on. . . . No problem. Good-bye."

Clare is delighted with the LANSCAPE utility. She roves electronically from one troubled user to another, seeing on her screen exactly what the user sees. The amount of time it takes to solve the problems is about the same, but because she can solve them from her desk, she has eliminated the frustrating delays of travel time. In addition, she is at her desk when the users call, and they are pleased with the fast response time.

Clare even has time to scan users' activities without their making a request. Her troubleshooting has become more proactive than reactive. She can scan a number of users without their knowledge, and when she finds one in trouble, she can interrupt and help.

"Harry, this is Clare in Systems. I'm looking at your screen now. . . . I know you didn't call, but I thought I'd beat you to the punch. You can speed up that multiple posting to a single customer by using the TAB key instead of updating the record for each entry. . . . Yes, like that. . . . Glad to be of service."

Last week Clare and her boss, the Director of User Support, met with the Vice President of Information Systems, Art Betony, to evaluate LANSCAPE. Clare said, "Without this program, I'd have to control the activities of every user in every system test and move from one building to the other. With LANSCAPE, I can watch over their shoulders without being there. LANSCAPE is inexpensive and easy to use. I fully endorse its continued use and recommend we obtain additional copies and make it available to all support personnel." The three went on to discuss the increase in user satisfaction and productivity that had resulted from the use of LANSCAPE.

Yesterday Art was having his usual Tuesday lunch with his boss, Executive Vice President Alberta Wilson. Art couldn't stop praising LANSCAPE.

Alberta seemed especially interested. "You mean you can tell me at any time what people are doing?"

"Not quite," Art answered. "We can only see the screens of the users who are logged in. But of course that's exactly what my people need for their purposes."

"But the people you observe this way . . . do they know their screens are being observed?"

"No, not unless we tell them. The LANSCAPE program doesn't change anything on their screens. Of course, that's a necessary feature of the system because my people have to see exactly what the users see."

"Could you install LANSCAPE on my terminal, in my office?"

"Of course. But what value would that be?"

Alberta leaned forward and whispered, "I shouldn't reveal this outside the Human Resources department, but I think I want to enlist your support. Here at headquarters, we may have one or more persons dealing in

drugs. We have suspects but no proof. Somehow these people are taking orders and making deliveries right on the premises. And during company time. I suspect they're using the phone and maybe even the computer to make their deals. We tried various surveillance methods with no success. What I want to do is use LANSCAPE to randomly check on what the suspects are doing. Then, if we catch them red-handed, we'll have our evidence and we can prosecute."

Art frowned and said, "Gee, I don't know if I should give you that software, Alberta. Let me think about it and get back to you."

DISCOVERING AN ETHICAL DILEMMA

The following narrative illustrates the kind of reasoning and activity that could take place after Art's lunch with Alberta.

When Art leaves Alberta, he is bothered by a vague notion that Alberta's request poses some questions that must be resolved before he responds to her. He needs to discover whether there is an ethical dilemma that needs a closer look. The first thing he does is reflect on the current laws that may govern the situation. The illegality of the drug dealing is not in question. The main legal issue is whether monitoring in this situation is permitted. Though he is not a lawyer, Art does know something about laws in his professional area of information systems. Generally, under current law, it is not illegal to monitor employee activity. Recently proposed laws in some states would require official notification of employees. Employers must tell them (1) they are being monitored, (2) what information is being collected, and (3) what it is to be used for. Art concludes that using LANSCAPE internally, on company-owned systems, even without the knowledge of the employees, is legal. To remove any doubts about that conclusion, and to confirm his own position, he calls the company lawyer, who confirms that such monitoring activity is legal.

Even though the activity is legal, Art still feels there is an ethical dilemma. At this point he looks to guidelines for assistance. First he asks, "Is there something he or others would prefer to keep quiet?" On one hand, Alberta wants to keep her surveillance quiet. Clare, however, lets people know she is watching, although often only after the fact. Both approaches raise an ethical question.

Art then tries the Mom Test, but it is inconclusive. Clare's mom would probably be proud of the way Clare is being so helpful and productive, and she would certainly approve of catching the drug dealers. But Clare might not want to tell her how she invaded some innocent people's privacy. Even on nationwide TV (the TV Test), or through an ad in the *New York Times* (the Market Test), the monitoring could be portrayed as positive and praiseworthy. Applying the Smell Test, however, Art feels in his bones that there is a problem with Alberta's request.

You might conclude that the firm would not want to go on TV or take out the ad, because it would not want to admit that it suspected drug deal-

ing on the premises. That, however, is not the point of these tests. The aim of the tests is to discover our level of "comfort" with our actions in response to an ethical dilemma. Art's problem is that he does not feel justified in performing the surveillance.

Since the tests so far do not give Art a clear direction, he then moves on to more formal guidelines. First, is the act consistent with corporate policy? Art Betony must find out if there is a policy on monitoring. Based on Alberta's admission of prior surveillance attempts, the form of which she doesn't explain, there may be a policy allowing monitoring. But the likelihood is that there is no policy at all. It is not unusual for even large organizations to have few explicit policies, especially concerning computer use. And often, even when there are policies, they are not well publicized or enforced. In this case, Art finds out that none exist. He also discovers that there is no corporate code of conduct or code for ethical computer use.

As for professional codes, since Art is a member of the Association for Computing Machinery (ACM), he decides to examine the ACM Code of Ethics and Professional Conduct (see Appendix A). Some imperatives that might apply are:

1. General Moral Imperatives

As an ACM member I will . . .

1.1 Contribute to society and human well-being

Apprehending the drug dealers will certainly contribute to society. This imperative supports giving LANScape to the executive V.P.

1.2 Avoid harm to others

Computer users who are not involved with drugs may be harmed if they are monitored. Their privacy might be violated. Personal messages, if they are permitted, may be revealed. Also, their actions may be subject to misinterpretation, as explained later in the discussion of the Golden Rule. So on that basis, Art should avoid participation in the monitoring. On the other hand, anyone seduced into drug use is surely being harmed; stopping the drug dealing would reduce or eliminate that effect. From that standpoint, facilitating the monitoring might be ethically defensible.

1.7 Respect the privacy of others

As stated above, innocent computer users, as well as the guilty, have their privacy violated by the monitoring.

3. Organizational Leadership Imperatives

As an ACM member and an organizational leader, I will . . .

3.2 Manage personnel and resources to design and build information systems that enhance the quality of working life

Monitoring without knowledge and permission, it may be argued, does not enhance the quality of working life of those monitored. Sooner or later,

facts or even rumors about the monitoring will surface. The outcome could include any number of results, fear and resentment among them.

3.3 Acknowledge and support proper and authorized uses of an organization's computing and communication resources

This imperative summarizes Art Betony's dilemma. Is the monitoring a *proper* and *authorized* use of the computing resource? If policy allows it, the monitoring may be authorized, but that is only half the requirement. The use must also be proper to justify Art's support. Thus the code is not helpful in labeling this action as either proper or improper.

3.5 Articulate and support policies that protect the dignity of users and others affected by a computing system

It could be argued that monitoring without permission or knowledge does not protect dignity, that it shows disrespect for the individual. Article 3.5 would thus support Art in not providing the software to Alberta Wilson.

In summary, Art's reference to the ACM code still leaves him with the ethical problem unsolved. There is a strong argument in favor of monitoring—to foster human well-being—but some imperatives support the opposing view of respecting privacy. Finally, some imperatives, such as Article 3.3, represent worthwhile objectives, but do not contribute to the solution directly.

The final guideline asks, does the action violate the Golden Rule? In other words, Art must ask himself if he would want this done to him. Would he want his work monitored without his knowledge or permission? Some might answer that they have nothing to hide, and therefore such monitoring would be acceptable. Others might argue that although they have nothing to hide, some actions could be misinterpreted, and thus they would object to monitoring. For example, suppose the person being monitored is creating a word processing document, and the observer monitoring that activity sees hardly any words being keyed. The observer might conclude that the worker is lazy or inefficient. The worker, however, is actually composing a major market analysis and consulting numerous source documents. Thus, research time is interspersed with the typing. In the Califon case, it appears that the Golden Rule does not give Art a conclusive answer.

At this point, it is clear to Art that there is an ethical dilemma. His informal analysis, however, has not defined his dilemma with very much precision nor has it given him a specific course of action. Art must now move to an examination of ethical principles and the application of the four-step process.

USING THE FOUR-STEP PROCESS

This commentary will follow the four-step process for ethical analysis and decision making (Figure 3-1) to reach a conclusion about the sample case.

Each element of the process will be broken into three parts. The first part will explain the structure of the process and the rationale for the particular step being executed. The second part will present the authors' ethical analysis of the sample case in the form of a worksheet entry. This will also illustrate how the worksheets in Appendix B are used to organize the process responses. The third section will discuss how the authors arrived at the ethical analysis.

Step I. Understanding the situation

IA. List and number the relevant facts.

Process Structure

Step IA may seem simplistic and unnecessary. Yet great confusion and wasted effort can result if all parties do not understand the situation the same way and agree on the facts. It need not take long, but Step IA is essential.

The case study presents many facts, some more relevant than others. Stating these facts should be, as much as possible, a neutral, logical exercise. Although interpretation is involved in selecting pertinent facts, do not judge them in this step. Comments such as "Clare should not have viewed anyone's screen without their permission" are inappropriate here. The fact that Clare "roves electronically," however, must be noted. Facts that raise ethical questions will be further handled in Step IB.

Another value to listing the relevant facts is to discover what we don't know. We never have all the information we need when making decisions. Sometimes we can afford to spend the time and other resources to find out more. But at some point, we must make decisions based on whatever information we have on hand. Lack of information is not an excuse for deferring action. Decision makers must be willing to make a choice based on the current facts, and must possess the courage to reevaluate that choice and, perhaps, change it when new facts become known.

| Worksheet Entry | |
|---|---|
| Step IA. List and number the relevant facts. | |
| Number | Fact |
| 1 | Califon is a distributor of electronic equipment, with a large in-house computer system supporting more than 100 users. |
| 2 | Clare Valerian is a Califon technical-support person who helps end-users with their computer problems. |
| 3 | Clare has a new utility program, LANSCAPE, that enables her to duplicate on her screen exactly what is taking place on a user's screen. |

- 4 LANSCAPE allows Clare to "rove electronically," that is, to view, without their permission, what people are doing on their computers.
- 5 LANSCAPE enables Clare to avoid having to go to the user to solve a problem, resulting in greater efficiency and more satisfied users.
- 6 Clare recommends continued use of LANSCAPE and suggests making it available to others in her group who perform similar troubleshooting activities.
- 7 Art Betony, V.P. for Information Systems, is so impressed with LANSCAPE that he describes its success to Alberta Wilson, Califon Executive V.P.
- 8 Alberta reveals that there may be a drug-dealing operation at Califon.
- 9 Alberta tells Art of other surveillance attempts.
- 10 Alberta asks for LANSCAPE on her terminal so she can monitor the computer activities of the suspected drug dealers.
- 11 Art Betony makes no immediate commitment.

Discussion

We could perhaps add other "facts," such as the Califon chain of command. Or, it may be argued that some of the "facts" listed are really value judgments or opinions and should be deleted in favor of purely objective statements. For example, the statement that Clare was "roving electronically" without permission is in one sense a fact, but in another sense a judgment about Clare's actions. Thus, an argument could be made to leave it off the list in Step IA. If you take that position, be sure Clare's "rovings" are included in Step IB and the discussion in Step IV.

The best approach for the sake of completeness is to list *all* facts in Step IA, referring to some of them again in Step IB. If it makes sense to distinguish "subjective" from "objective" facts, label them appropriately. What this step is trying to answer is, "What is the subject of this case?" or "What is it all about?" Of course, these questions have a variety of answers, but the answers should be simple. Longer answers tend to bring in the reasons for the actions, which belong in Steps III or IV. In this case, the answers must reflect the facts that LANSCAPE allows one person to monitor what others are doing at their computers without their knowledge; that LANSCAPE is a useful tool for technical-support personnel; that the Executive V.P. thinks there is drug dealing at Califon; and that the Executive V.P. wants to use LANSCAPE to monitor employee computer use to find the drug dealers.

IB. Which of these raises an ethical issue? Why? What is the potential or resulting harm?

Process Structure

As mentioned earlier, ethical dilemmas are composed of multiple issues, which must be "peeled" like an onion. Some issues are more important than others. Some issues must be resolved before others. At this stage in the analysis, it is important to look at the facts as we know them and indicate which ones raise ethical questions and give some reason why we feel that way. A complete ethical analysis is not called for. We will do that later for the major ethical issue.

| Worksheet Entry | |
|---|--|
| Step IB. Which of these raises an ethical issue? Why? What is the potential or resulting harm? | |
| <i>Fact (number)</i> | <i>Potential or resulting harm</i> |
| 4 | Users not informed of "roving," privacy question |
| 8 | Illegal activity, drug users and company harmed |
| 9 | Was this (another) invasion of privacy? |
| 10 | Is this fair to all concerned? |

Discussion

In almost any ethical situation, multiple contributory actions occurring over a period of time lead to a crisis situation or, as it is sometimes called, "the moment of truth," when a decision must be made. Step IB is designed to peel away those contributory actions to expose the "real" issue or, more precisely, the issue to be dealt with now. Usually the contributory actions have already happened, and it is their effect that is being felt at present. We may wish they had not happened, and may subsequently have to confront the perpetrators of those actions, but at the moment, we have to deal with their effects.

In this case, fact 4 (Clare looks at users' screens without their knowledge or permission), although a questionable act, is not the major issue at this moment. Fact 8's assertion of drug dealing, if true, could be problematic in a number of ways. People who abuse drugs will continue to be harmed, the company's reputation may suffer if word gets out, and worker productivity could diminish if the drugs are taken on the job. This, too, is not the primary issue, but rather a serious contributing factor to the dilemma. Fact 9 raises the issue of appropriate measures. We don't know how Alberta performed her previous monitoring, and it may be that rights

were violated and the actions were not justified. However, these past actions do not need to be addressed immediately.

Fact 10 points to the real issue, the "moment of truth," although it does not express it directly. But because of the other actions we have considered, Alberta's request raises similar questions of privacy invasion, users' rights, and the necessity to respond to the suspected drug dealing.

Some may suggest that other questionable actions, or other reasons for a questionable action, could be added to Step IB. This is certainly possible. However, the reasons in this step are expected to be cursory and not a full ethical analysis. We are only interested in an elementary justification for the inclusion of a given action.

As to whether every action should be included, the rule is the same as for including relevant facts. When in doubt, include the action. For example, you might want to include fact 11 (Art makes no immediate comment). Doesn't Art have a duty to obey his superior? Is it ethical for him to hesitate? The main objective of Step IB is to list enough questionable actions so the current issue becomes clear. We'll come back to this in Step II. At this time, however, we must agree on one further set of facts that will aid in the analysis. We need to ask, who are the stakeholders?

IC. List the stakeholders involved.

Process Structure

Listing the stakeholders is a key task in this analysis because it helps to determine who is affected by the action. Often, this part of the exercise generates some surprises. Sometimes, just realizing that someone is a stakeholder influences the solution and recommendations. Later, in Step IVC, we will test our conclusions by examining how these stakeholders are affected by the decisions we have made.

Worksheet Entry

Step IC. List the stakeholders involved.

Clare
 The Director of User Support
 Art Betony, V.P. Information Systems (and his family)
 Alberta Wilson, Executive V.P.
 The other technical-support people
 All computer users at Califon
 The suspected drug dealers
 The drug users, customers of the dealers
 Califon as a corporation
 All Califon employees

| |
|---------------------------|
| Califon stockholders |
| Califon customers |
| Society as a whole |
| The producers of LANSCAPE |
| Other LANSCAPE users |

Discussion

A judgment must be made whether a stakeholder is important enough to be listed. There may be a number of secondary or fringe stakeholders, and including them and their claims might not contribute much to the solution. In this case, one could argue that other users of LANSCAPE are stakeholders because any misuse of that software or bad publicity it receives might have implications for them. But such an occurrence, should it happen, is clearly not central to the issue. Fringe stakeholders might be listed for the sake of thoroughness or as a way of accounting for all concerned parties, but it is a waste of time to spend any further effort on those whose interests have no significant bearing on the outcomes.

Step II. Isolating the major ethical dilemma

What is the ethical dilemma to be resolved NOW? State it using the form: Should **someone** do or not do **something**? Note: Just state the dilemma here; leave any reasoning for Step III.

Process Structure

This is where the true focus of the case is clearly expressed. Solving this dilemma is the major task. Choosing the right issue, and having participants in the process agree on what that issue is, is so important that this action is given its own separate step.

The way the issue is expressed is also important to its analysis and resolution. An issue, by definition, implies controversy and more than one point of view. Simply saying that the issue in this case is "privacy" or "the employee's right to privacy" is not sufficient. Privacy and privacy rights are only aspects of the issue. What is it about privacy that is being questioned? It is whether or not it is being violated. Hence, an issue is best presented in the form of a question so that the resolution is the answer to that question.

We suggest posing a question in the form, "Should **someone** do or not do **something**?" The present tense is used because we are focusing on the current "moment of truth," not on past contributory actions. Secondly, the format requires identification of an actor and an action. This focuses the ethical analysis. It is *this* actor and *this* action that is to be evaluated. The actor can be a person or, more generally, a corporate "person." If we don't know who the responsible individual is, it is appropriate at this point to enter in Step II words like "the organization" or "management," for ex-

ample, "Should LANSCAPE management have issued its software without a privacy warning?"

Though the question is simple and refers to one actor and one action, dilemmas with multiple actors and actions are accommodated through the analysis in Step III, especially when considering rights and duties, and throughout Step IV. Finally, any ethical reasoning should be left to Step III. There is no need to justify or explain the Step II entry.

Worksheet Entry

Step II. Isolating the major ethical dilemma

What is the ethical dilemma to be resolved NOW?

Should Art provide LANSCAPE software to Alberta so she can monitor computer activities in an attempt to discover suspected drug dealers?

Discussion

This is the major dilemma for Art now. However, as described in Step IB, other dilemmas and contributing factors will influence him. Some are: Should Alberta Wilson monitor employee computer use without their knowledge or consent? (This is really one aspect of the major dilemma.) Should Clare have done her electronic roving without the knowledge and consent of her users? (A contributory factor, but not central now.) Should Califon management have established a policy on computer monitoring prior to implementing LANSCAPE? (A contributory factor, but not central now.) Should Alberta have told Art Betony about the suspected drug dealing? (A contributory factor, but not central now.) Should Art refuse the request of his superior? (One aspect of the major dilemma for Art.) Some of these issues are more important than others. But the minor issues should not be overlooked, as they often provide insights into attitudes or actions that contribute to the solutions and recommendations. In this case, the central question is whether to give Alberta the software.

Step III. Analyzing the ethicality of both alternatives in Step II

Step III takes the most time and discussion. This is appropriate, since without fully understanding the ethical issues, a quality decision cannot be achieved. In Step III, ethical analysis is performed through responding to a set of questions that have at their core a number of commonly held ethical principles. The answers to the questions do not give the "ethical solution," but do provide insight into how a given principle applies to the situation. The individual still must synthesize all the responses and draw his or her own conclusions based on personal judgment. The purpose, how-

ever, is to provide supporting reasoning for whatever conclusion is drawn. This part of the process provides the ethical defense for that conclusion.

Step III is divided into three major sections representing consequentialism, rights and duties, and Kant's categorical imperative.

Consequentialism

Process Structure

Each question should be read using a consistent form of the action in Step II. For instance, item A below might be read, "If Art gives *LANSCAPE* to Alberta, who, if anyone, will be harmed?" Usually the names of the individuals are a sufficient response, but sometimes the nature or magnitude of the result is helpful. Thus, the response for A includes the fact that innocent computer users would experience potential privacy violations. It is possible that no one will be affected or that some aspect of the ethical principle does not apply to the question. In these cases, "no one" or "not applicable" are appropriate entries.

Worksheet Entry

Step III. Analyzing the ethicality of both alternatives in Step II

Consequentialism

A. If action in Step II is done, who, if anyone, will be harmed?

Innocent computer users' privacy is violated, drug dealers may get caught

B. If action in Step II is not done, who, if anyone, will be harmed?

Those newly "hooked" on drugs and current addicts continue to get supplied; Calfon may suffer through low productivity, possible accidents, and bad reputation, resulting in negative effects for employees, stockholders, customers.

C. Which alternative results in the least harm, A or B?

A

D. If action in Step II is done, who, if anyone, will benefit?

All employees, those who would be "hooked," Calfon, customers (better product), society (if dealers are caught)

E. If action in Step II is not done, who, if anyone, will benefit?

Drug dealers, current drug users, innocent computer users

F. Which alternative results in the maximum benefit, D or E?

E

Discussion

At this point we have some insights into the harm and benefits that may result from giving or not giving Alberta the software. In a sense, we are performing a cost-benefit analysis, weighing the amount of benefit and harm from a given action. How weights are applied will influence the answer. It may be misleading to simply use the numbers of people involved as the criterion.

For example, certainly more people will be potentially harmed if Art does not give Alberta the software than will be harmed if he does give it to her. Yet that is not the whole story. Other factors have to be weighed and included in the equation before an entry is made in section C. How important is privacy? What is the likelihood of this situation becoming a problem for customers, employees, and stockholders? How an individual judges each of the entries in the equation determines which response is entered in C, and later in F. In the preceding sample analysis, privacy rights of innocent computer users were given strong emphasis in A and E, tipping the scales in that direction. So even though there were large numbers of people benefitting in B and D, and even though drug dealers and users seem to get a break, the authors reasoned that A and E were the most desirable conditions.

Rights and Duties

IIIG. What rights have been or may be abridged? What duties have been or may be neglected? Identify the stakeholder and the right or duty. When listing a right, show its corresponding duty and vice versa.

Process Structure

The entries expected here are explained in detail in Chapter 1. Analysis can start with a right that is not being respected or a duty that is not being met. Either way, the corresponding right or duty is discovered next. There are numerous rights and duties in any situation. It is important to isolate those that are relevant to the issue in Step II.

Worksheet Entry

Step III. Analyzing the ethicality of both alternatives in Step II

Rights and Duties

G. What rights have been or may be abridged? What duties have been or may be neglected?

1. Employees have a **right** to know they are monitored. Califon has a **duty** to tell them.
2. Califon has a **right** to protect its assets and reputation. Employees have a **duty** not to inhibit productivity/quality by drug use.

3. Art, as an employee, has a **duty** to serve Califon, principally Alberta, his boss. Alberta has a **duty** not to ask Art to do something that may violate his principles.
4. Califon has a **duty** to protect its employees. Employees have a **right** to a safe (drug-free) workplace.
5. Clare has a **duty** to explain the monitoring function of LANSCAPE to her users. This is a question of *trust*, *integrity*, and *truthfulness* emanating from her *professional relationship* with the users. She, as the professional, has superior knowledge, and has the *responsibility* to see that those without that level of knowledge are not *harmed* as a result. The users have a **right** to expect this behavior.

Discussion

Other rights and duties may apply here, but these exemplify the ones that bear directly on the issue. Note that certain sets of rights and duties are in conflict. For example, the employees' right to know they are monitored inhibits Califon's ability to protect its assets by discovering the drug dealers. Such conflicts are resolved in a manner similar to the answers in the consequentialism section, by weighing one against the other and making a judgment.

In item 3 above, although only duties are mentioned, the rights of each to expect such behavior are implied. We consider this kind of intuitive leap a sign of more mature analysis. It occurs when one skips over more obvious associations and arrives at the more subtle and relevant relationships. Item 3 above could have been more explicitly stated as:

- 3A. Art has a **duty** to serve Alberta, his boss. Alberta has a **right** to request his help.
- 3B. Alberta has a **duty** not to ask Art to do something that violates his principles. Art has a **right** to refuse such a request.

Kant's Categorical Imperative

Process Structure

The approach here corresponds to the consequentialism section, in that questions are formulated to reflect various aspects of Kant's categorical imperative. Again, a principle may not apply, or in a given situation no one may be affected. For example, in K below, if Art gives LANSCAPE to Alberta, all users will be treated alike; they will be monitored. Thus, achieving that consistency does not necessarily contribute to an ethical solution.

Worksheet Entry**Step III. Analyzing the ethicality of both alternatives in Step II***Kant's Categorical Imperative*

H. If action in Step II is done, who, if anyone, will be treated with *disrespect*?

Innocent computer users

I. If action in Step II is not done, who, if anyone, will be treated with *disrespect*?

No one

J. Which alternative is preferable, H or I?

I

K. If action in Step II is done, who, if anyone, will be treated *unlike* others?

No one

L. If action in Step II is not done, who, if anyone, will be treated *unlike* others?

No one

M. Which alternative is preferable, K or L?

Neither

N. Are there benefits if everyone did action in Step II? (In other words, would we want everyone to be monitored or everyone to be able to monitor another at will?)

No. It would violate everyone's privacy.

O. Are there benefits if nobody did action in Step II?

Yes, privacy protected.

P. Which alternative is preferable, N or O?

O

Discussion

After considering and discussing arguments and principles, it is necessary to weigh them and draw conclusions. In this case, the issue boils down to user privacy rights versus the public good of apprehending drug dealers and the corporate good of the intrinsic value of LANSCAPE. The authors believe that the right to privacy and the issues of permission and informed consent to the monitoring outweigh the need to discover the drug dealers. In some circumstances, rights may be legitimately set aside or limited, especially when other rights may be at stake. For example, invasion of privacy may be justified to prevent greater harm, as when someone breaks into a locked dorm room from which smoke is discovered coming under

the door. The need to put out the fire, and perhaps save a life, overrides the privacy right.

Based on what we know in this case, it is not clear whether preventing the greater harm (drug dealing) will really be achieved. We have no idea of the extent of the drug operation, if any; how much harm it is doing, if any; how much risk of harm it presents to Califon and its employees; how sure Alberta is that the drug dealing exists; what chance she has of actually finding the culprits; how admissible the evidence acquired from the monitoring will be; what the law enforcement authorities have to do with this; and what the CEO and Board of Directors feel, or whether they are informed at all.

Furthermore, we have no idea of what harm will be caused to innocent people who are included in the monitoring. Nor do we know whether such monitoring will stop after the drug bust. Suppose the drug dealers are not using the computer to help them? How far and for how long will the search be expanded before this is discovered?

It makes no difference that Alberta previously performed other forms of surveillance. Those actions may have been illegal and unethical. It also makes no difference that Art is Alberta's subordinate. His duty to the organization and other stakeholders overrides his relationship with Alberta. Of course, as a practical matter, he may lose his job or suffer other harm, which has implications for his duty to self and family. But that is not sufficient reason for him to violate his responsibility as a computer professional and act unethically. Thus, in this case, G1, H, and O outweigh the other entries, and Art should refuse to allow Alberta to use LANSCAPE as she proposes. We can now enter this conclusion in Step IVA.

Step IV. Making a decision and planning the implementation

IVA. Make a defensible ethical decision.

Based on the analysis in Step III, respond to the question in Step II. Indicate the letters of the categories that best support your response. Add any arguments justifying your choice of these ethical principles to support your decision. Where there are conflicting rights and duties, choose and defend those that take precedence. (Note: Just make and justify your choice here; leave any action steps for parts B and D, which follow.)

Process Structure

Step IV is essential for placing the situation in a real context, for moving from principles to practices. The justification and supporting arguments are what bring quality to the ethical decision. Disagreements among decision makers can be discussed through arguing principles rather than through emotion or personal biases. Furthermore, isolating principles provides an avenue for generalizing the specific conclusion in the case to similar situations as they arise.

| Worksheet Entry |
|--|
| <p>Step IVA. Make a defensible ethical decision.</p> <p>Based on the analysis in Step III, respond to the question in Step II.</p> <p>Art should not provide LANSCAPE to Alberta without further information (see Step IVB below). G1, H, O The right to privacy and treating users with respect are more important than catching drug dealers, especially since the likelihood of this succeeding is slim.</p> |

Discussion

There may be other remedies to this situation that do not require anyone to act unethically. Making defensible ethical decisions may leave us feeling uncomfortable. Perhaps we have not tied up all the loose ends or some harm results from the choice we make, even though it appears the best choice possible. Ethical choices are not made with absolute certainty; they are not deductive like mathematical problems and solutions. Ethical decisions are made through judgment and by validating that judgment through a rational appeal to principles. The danger is in not acting at all, in never making a decision or judgment. As the axiom says, "Not to act, is to act." Failing to act will simply allow a wrongful situation to continue or get worse. The best you can do is be aware of the opposing positions, make the decision on the available facts, and as facts and circumstances change, have the courage to defend or change your decision.

We have made a choice, what we see as the lesser of two evils. A lot could still go wrong, but that should not change the choice. What is required is a thorough response in Step IVB.

IVB. List the specific steps needed to implement your defensible ethical decision.

Process Structure

The discovery of the potential harm or neglected duties or people being mistreated is synthesized to arrive at a defensible ethical decision. But knowing what to do and deciding how to do it are two completely different things. Awareness of harm, duties, or mistreatment, however, can guide us to implementation steps that take those factors into account, and deal with them.

Worksheet Entry

Step IVB. List the specific steps needed to implement your defensible ethical decision.

1. Art meets with Alberta and explains the importance of privacy rights and the potential for damaging morale, lowering productivity, and setting a bad precedent. Together they plan an ethical response.
2. Publish a policy that, at a minimum, announces to all users and potential users how LANSCAPE works.
3. Only then, perhaps, install LANSCAPE for Alberta, since users will now use it with informed consent.
4. Engage law enforcement help in apprehending the drug dealers.
5. Be prepared to defend the ethical decision should the drug dealing become public or other calamity happen.

Discussion

Art and Alberta might decide to involve top management, perhaps even the Board of Directors. They must answer the questions raised in Step III: Is there a policy governing monitoring? What previous type of surveillance has taken place? Who knew about it? Was it legal? Were law enforcement authorities involved? Just how serious is the risk to Califon? How many people are involved? What is the basis of the suspicion of drug dealing? What is the likelihood of discovering sufficient evidence for arrest and conviction? These answers will put the problem in better perspective and may lead to further questions and suggestions for action.

At the very least, a top-level policy decision on monitoring should result. Such a policy might state that the computer resource is owned by Califon and is to be used for Califon business. Further, it could state that no presumption of privacy should be made by those using the system. As an example, or as a special section, the use and full capability of LANSCAPE could be explained.

Publishing the policy would put all users on notice, would satisfy the knowledge requirement, and might provide the ethical justification for some limited monitoring to discover the drug dealers. The drug dealers could react in two ways. They could take the publication of the policy casually, as just another memo to be filed. In that case, they might well be caught through the monitoring. Or, if they took the memo seriously, they would stop using the computer for their activities. This might diminish or end their ability to operate at Califon or force them to operate in a more open manner, which may lead to their discovery. In other words, being open and ethical about the potential for monitoring might very well have the same result as being covert and unethical.

IVC. Show how the major stakeholders are affected by these actions.

Process Structure

This is a checkpoint. Evaluating how each stakeholder is affected shows what harms are still possible and what value the decision has brought. This guides implementation decisions and reduces surprises during the implementation phase.

Worksheet Entry

Step IVC. Show how the major stakeholders are affected by these actions.

1. Clare now acts "openly."
2. The Director of User Support can now proliferate use of LANSCAPE without compounding the problem.
3. Art and Alberta fulfill their duties to the users, Califon, and each other.
4. The other technical support people can use LANSCAPE properly.
5. Computer users and their privacy are respected.
6. Perhaps drug dealers and users are apprehended in spite of informing users of the possibility of monitoring through LANSCAPE.
7. Califon, all its customers, employees, and stockholders are assured of a quality product and avoid the threat of bad publicity and other dire consequences.
8. Society as a whole will benefit from increased privacy protection, but may suffer should the drug dealers not be caught.
9. The producers and other users of LANSCAPE can benefit from this experience and avoid similar dilemmas.

Discussion

Most of the effects appear to be positive. The one serious danger is that it will be business as usual for the drug dealers.

IVD. What other longer-term changes (political, legal, technical, societal, organizational) would help prevent such problems in the future?

Process Structure

This step asks you to apply your knowledge of organizations, politics, the legislative process, technology, and society to suggest broad, global, long-term solutions to prevent this kind of situation from happening again. You might also consider:

What organizational support structures or obstacles exist, and what might be needed?

Can (additional) disclosure, communication, or compromise resolve the issue or prevent recurrence? How can this be done?

Worksheet Entry

Step IVD. What other, longer-term changes would help prevent such problems in the future?

1. Foster an ethical corporate culture at Califon so that people like Clare, Art, and Alberta can become sensitive to ethical situations.
2. Develop a code of ethics, teach it, and reward adherence to it. Such an initiative often benefits the company in the form of a good reputation that is marketable.
3. Establish an ethics hotline at Califon, a free phone number or some other way of reporting unethical activity. This should include any unethical activity, not just unethical activities involving computers. Through such a vehicle, Clare's roving might have been reported and the drug dealers might even have been exposed.
4. Enact state or federal statutes to protect workers who are monitored. (Legal solutions, however, often require a long time and great expense.)

Discussion

Each of these suggestions requires further discussion and analysis. This could amount to a comprehensive feasibility study that might include gathering more data about the proposed activity, performing a cost-benefit analysis, preparing an ethical impact statement, and drafting an implementation plan.

IVE. What should have been done or not done in the first place (at the pivot point) to avoid this dilemma?

Process Structure

Identifying pivot points is valuable for sensitizing individuals to the early-warning signs of an ethical situation. The earlier an ethical dilemma is discovered, the easier it is to solve, since there will be fewer layers to the problem.

Finding the pivot points after the fact is one way to discover corrective measures. Where could the situation have "turned around" if only someone had done something differently?

| Worksheet Entry |
|---|
| <p>Step IV. What should have been done or not done in the first place to avoid this dilemma?</p> <ol style="list-style-type: none"> 1. A policy decision was needed when the decision was made to perform Alberta's original surveillance. 2. An ethical impact study was needed of how LANSCAPE was to be used when it was first purchased. |

Discussion

If the privacy issues had been faced at the time of the original surveillance, that could have helped with the LANSCAPE problem. Had there been prior thought about the consequences of LANSCAPE use, Clare may not have been free to rove, users may have been more explicitly informed, and Alberta's request may never have arisen.

Other risks arise from not having an explicit privacy policy. One of the users might have been offended by Clare's roving without permission and could have reported it to another manager or even revealed it outside the company. Or, suppose Clare, in her roving, had discovered some improper computer use—game playing, for instance, or even the drug dealing? Without a policy or some supporting structure, she would have had no guidance in responding to these situations.

A Way to Expand the Analysis

Sometimes in Step III, or after Step IV, it is worthwhile to alter some of the parameters in the case to see if different circumstances change the analysis and perhaps lead to different outcomes. This helps to discover variables that might be controllable and hence could be part of the short- and long-term solutions. The following questions display one approach for altering parameters. They all take the form "Does it matter that . . ." The authors' responses are in brackets.

- Does it matter that Calfon was an electronics company and not in some other industry? [No. Its obligation is the same no matter what the industry.]
- Does it matter that Alberta is a woman? [No. This is not a gender-based issue.]
- Does it matter that the offense is drug dealing and not something else, like game playing? [Yes. If it were a minor offense like game playing, a memo or bulletin board posting may have been sufficient.]
- Does it matter that the producers of LANSCAPE may have had no intention of their program being used in this way? [Probably not,

unless there was something in the license agreement. But perhaps they should have done an ethical analysis as they were developing the software and then put a warning label on the product.]

- Does it matter that Califon had no policy on computer monitoring? [It sure does. This was explained in an earlier section.]
- Does it matter that LANSCAPE produced enormous productivity gains? [No. This fact does not change the ethicality of covert surveillance.]
- Does it matter that Alberta sanctioned other forms of surveillance previously? [Yes. We need to know more about this because it is not clear whether this was an appropriate action.]
- Does it matter that the surveillance utility was designed specifically to be used in such a way that the user was unaware of its operation? [No. Just the existence of a functionality does not justify its use without considering other factors in the situation.]

Another question that should always be included is: If you could do it all over again, what would you do differently? In this case, one response to that question might be that Califon should have had some sort of corporate anti-drug campaign and policy that might have prevented the necessity for any of this. If the company had been vigilant early on, the drug dealing might never have started.

SUMMARY

As we demonstrated through the analysis of the sample case, ethical problems comprise many layers. To make and implement sound ethical decisions, you must understand all the facts. The stronger positions are those supported by ethical principles. Short- and long-term resolutions are not easy to develop or implement.

You are now ready to solve cases and make ethically defensible decisions on your own; that is, you will be able to give principled reasons for the decisions you reach.